Claims

[1] A chest of cinerary urns comprising a chest body having a plurality of urn receiving spaces each being open at a front side thereof to allow a cinerary urn to be placed in the urn receiving space, each of the cinerary urns storing cremated remains, and a plurality of cover plates detachably attached to the chest body at positions corresponding to the urn receiving spaces, respectively, to cover respective front sides of the urn receiving spaces, the chest further comprising:
seal members each interposed between a portion of the chest body around an associated one of the urn receiving spaces and the cover plate corresponding to the associated urn receiving space;
hollow inlet members each protruded from a portion of a rear wall of the chest body corresponding to an associated one of the urn receiving spaces, each of the inlet members communicating with the associated urn receiving space;
valve mounting members each coupled to an associated one of the inlet members; and
injection valves each fitted in an associated one of the valve mounting members, and centrally provided with an injection hole to allow gas to be injected through the injection hole into the associated inlet member.

[2] The chest of cinerary urns according to claim 1, wherein each of the injection valves comprises:
a hollow valve body tightly fitted in the associated valve mounting member, the valve body being provided, at one side thereof, with a tube fitting hole while being provided, at the other side thereof, with a gas inlet communicating with the associated inlet member;
a valve seat hole formed at the valve body between the tube fitting hole and the gas inlet, the valve seat hole having a frustoconical cross-section having an area gradually increasing as the valve seat hole extends from the tube fitting hole to the gas inlet;
a valve stem arranged in a gas passage defined in the valve body between the gas inlet and the valve seat hole to extend through the valve seat hole while being movable along the gas passage, the valve stem having a cross-section conforming to the cross-section of the valve seat hole;
a pressing protrusion extending from one end of the valve stem into the tube fitting hole; and

a spring arranged in the gas passage to elastically support the other end of the valve stem.

[3] The chest of cinerary urns according to claim 1, further comprising:
steps each formed at an inner surface of an associated one of the valve mounting members; and
micro filters each arranged in an associated one of the valve mounting members such that the micro filter is interposed between an associated one of the steps and an associated one of the inlet members.

[4] The chest of cinerary urns according to claim 1 or 3, further comprising:
safety valves each mounted to an associated one of the valve mounting members such that the safety valve communicates with the interior of the associated valve mounting member.

[5] The chest of cinerary urns according to claim 1, wherein:
each of the cover plate is opened at a central portion thereof, and provided with a transparent member attached to the central portion.

[6] The chest of cinerary urns according to claim 1 or 2, further comprising:
injection hoses each connected, at one end thereof, to an associated one of the inlet members while being connected, at the other end thereof, to an associated one of the valve mounting members.

[7] The chest of cinerary urns according to claim 1 or 2, further comprising:
injection hoses each connected, at one end thereof, to an associated one of the inlet members;
a distribution tube commonly connected to respective other ends of the injection hoses; and
a valve mounting member connected to the distribution tube, and provided with the injection valve.

[8] The chest of cinerary urns according to claim 1 or 5, further comprising:
pressure gauges each mounted to an associated one of the cover plates or transparent members.

[9] A cinerary urn chest comprising a chest body having an urn receiving space being open at a front side thereof to allow a cinerary urn to be placed in the urn receiving space, the cinerary urn storing cremated remains, and a cover plate detachably attached to the chest body at a position corresponding to the urn receiving space to cover the front side of the urn receiving space, the chest further comprising:

a seal member interposed between a portion of the chest body around the urn receiving space and the cover plate;
a hollow inlet member protruded from a portion of a rear wall of the chest body while communicating with the urn receiving space;
a valve mounting member coupled to the inlet member; and
an injection valve fitted in the valve mounting member, and centrally provided with an injection hole to allow gas to be injected through the injection hole into the inlet member.

[10] The cinerary urn chest according to claim 9, wherein the injection valve comprises:
a hollow valve body tightly fitted in the valve mounting member, the valve body being provided, at one side thereof, with a tube fitting hole while being provided, at the other side thereof, with a gas inlet communicating with the inlet member;
a valve seat hole formed at the valve body between the tube fitting hole and the gas inlet, the valve seat hole having a frustoconical cross-section having an area gradually increasing as the valve seat hole extends from the tube fitting hole to the gas inlet;
a valve stem arranged in a gas passage defined in the valve body between the gas inlet and the valve seat hole to extend through the valve seat hole while being movable along the gas passage, the valve stem having a cross-section conforming to the cross-section of the valve seat hole;
a pressing protrusion extending from one end of the valve stem into the tube fitting hole; and
a spring arranged in the gas passage to elastically support the other end of the valve stem.

[11] The cinerary urn chest according to claim 9, further comprising:
a step formed at an inner surface of the valve mounting member; and
a micro filter arranged in the valve mounting member such that the micro filter is interposed between the step and the inlet member.

[12] The cinerary urn chest according to claim 9 or 11, further comprising:
a safety valve mounted to the valve mounting member such that the safety valve communicates with the interior of the valve mounting member.

[13] The cinerary urn chest according to claim 9, wherein:
the cover plate is opened at a central portion thereof, and provided with a transparent member attached to the central portion

[14] The cinerary urn chest according to claim 9, wherein the chest body is provided, at outer surfaces of opposing walls thereof, with a plurality of engagement protrusions and a plurality of engagement grooves corresponding to the engagement protrusions, respectively.

[15] The cinerary urn chest according to claim 9 or 13, further comprising:
a pressure gauge mounted to the cover plate or transparent member.

AMENDED CLAIMS
[received by the International Bureau on 12 november 2004 (12.11.04); original claims 1-15 relaced by amended claims 1-15 (4 pages);

Claims

1. A chest of cinerary urns comprising a chest body having a plurality of urn receiving spaces each being open at a front side thereof to allow a cinerary urn to be placed in the urn receiving space, each of the cinerary urns storing cremated remains, and a plurality of cover plates detachably attached to the chest body at positions corresponding to the urn receiving spaces, respectively, to cover respective front sides of the urn receiving spaces, the chest further comprising:

seal members each interposed between a portion of the chest body around an associated one of the urn receiving spaces and the cover plate corresponding to the associated urn receiving space;

hollow inlet members each protruded from a portion of a rear wall of the chest body corresponding to an associated one of the urn receiving spaces, each of the inlet members communicating with the associated urn receiving space;

valve mounting members each coupled to an associated one of the inlet members; and

injection valves each fitted in an associated one of the valve mounting members, and centrally provided with an injection hole to allow gas to be injected through the injection hole into the associated inlet member;

wherein each of the injection valves comprising:

a hollow valve body tightly fitted in the associated valve mounting member, the valve body being provided, at one side thereof, with a tube fitting hole while being provided, at the other side thereof, with a gas inlet communicating with the associated inlet member;

a valve seat hole formed at the valve body between the tube fitting hole and the gas inlet, the valve seat hole having a frustoconical cross-section having an area gradually increasing as the valve seat hole extends from the tube fitting hole to the gas inlet;

a valve stem arranged in a gas passage defined in the valve body between the gas inlet and the valve seat hole to extend through the valve seat hole while being movable along the gas passage, the valve stem having a cross-section conforming to the cross-section of the valve seat hole;

a pressing protrusion extending from one end of the valve stem into the tube fitting hole; and

a spring arranged in the gas passage to elastically support the other end of the valve stem.

3. The chest of cinerary urns according to claim 1, further comprising:

steps each formed at an inner surface of an associated one of the valve mounting members; and

micro filters each arranged in an associated one of the valve mounting members such that the micro filter is interposed between an associated one of the steps and an associated one of the inlet members.

4. The chest of cinerary urns according to claim 1 or 3, further comprising:

safety valves each mounted to an associated one of the valve mounting members such that the safety valve communicates with the interior of the associated valve mounting member.

5. The chest of cinerary urns according to claim 1, wherein:

each of the cover plate is opened at a central portion thereof, and provided with a transparent member attached to the central portion.

6. The chest of cinerary urns according to claim 1, further comprising:

injection hoses each connected, at one end thereof, to an associated one of the inlet members while being connected, at the other end thereof, to an associated one of the valve mounting members.

7. The chest of cinerary urns according to claim 1, further comprising:

injection hoses each connected, at one end thereof, to an associated one of the inlet members;

a distribution tube commonly connected to respective other ends of the injection hoses; and

a valve mounting member connected to the distribution tube, and provided with the injection valve.

8. The chest of cinerary urns according to claim 1 or 5, further comprising:

pressure gauges each mounted to an associated one of the cover plates or transparent members.

9. A cinerary urn chest comprising a chest body having an urn receiving space being open at a front side thereof to allow a cinerary urn to be placed in the urn receiving space, the cinerary urn storing cremated remains, and a cover plate detachably attached to the chest body at a position corresponding to the urn receiving space to cover the front side of the urn receiving space, the chest further comprising:

a seal member interposed between a portion of the chest body around the urn receiving space and the cover plate;

a hollow inlet member protruded from a portion of a rear wall of the chest body while communicating with the urn receiving space;

a valve mounting member coupled to the inlet member; and

an injection valve fitted in the valve mounting member, and centrally provided with an injection hole to allow gas to be injected through the injection hole into the inlet member;

wherein the injection valve comprising:

a hollow valve body tightly fitted in the valve mounting member, the valve body being provided, at one side thereof, with a tube fitting hole while being provided, at the other side thereof, with a gas inlet communicating with the inlet member;

a valve seat hole formed at the valve body between the tube fitting hole and the gas inlet, the valve seat hole having a frustoconical cross-section having an area gradually increasing as the valve seat hole extends from the tube fitting hole to the gas inlet;

a valve stem arranged in a gas passage defined in the valve body between the gas inlet and the valve seat hole to extend through the valve seat hole while being movable along the gas passage, the valve stem having a cross-section conforming to the cross-section of the valve seat

hole;

a pressing protrusion extending from one end of the valve stem into the tube fitting hole; and

a spring arranged in the gas passage to elastically support the other end of the valve stem.

11. The cinerary urn chest according to claim 9, further comprising:

a step formed at an inner surface of the valve mounting member; and

a micro filter arranged in the valve mounting member such that the micro filter is interposed between the step and the inlet member.

12. The cinerary urn chest according to claim 9 or 11, further comprising:

a safety valve mounted to the valve mounting member such that the safety valve communicates with the interior of the valve mounting member.

13. The cinerary urn chest according to claim 9, wherein:

the cover plate is opened at a central portion thereof, and provided with a transparent member attached to the central portion.

14. The cinerary urn chest according to claim 9, wherein the chest body is provided, at outer surfaces of opposing walls thereof, with a plurality of engagement protrusions and a plurality of engagement grooves corresponding to the engagement protrusions, respectively.

15. The cinerary urn chest according to claim 9 or 13, further comprising:

a pressure gauge mounted to the cover plate or transparent member.

STATEMENT UNDER PCT ARTICLE 19

Claim 1 has been amended herein to merger claims 1 and 2, claim 9 has been amended to merger claims 9 and 10. Claims 6 and 7 has been amended to be dependent upon amended claims 1 and 9 rather than canceled claims 6 and 7. Claims 2 and 10 are canceled and claims 3-5, 8 and 11-15 are unchanged. The purpose of these amendment is to limit the scope of the claimed invention. These amendments should have no effect on the description and drawings.